



OMB No. 2010-0032  
Expiration Date 01/31/2010

## 2003 Performance Track Annual Performance Report

# American Ref-Fuel Company of Hempstead A020052

Year 2 Annual Performance Report

**SECTION A: GENERAL FACILITY INFORMATION****A.1 Name of your facility:**

American Ref-Fuel Company of Hempstead

**A.2 Name of your parent company:**

American Ref-Fuel Company

**A.3 Facility contact person for the Performance Track program:**

**Name:** Mr. Scott Wheeler  
**Title:** Environmental Engineer  
**Phone:** (516) 683-5438  
**Fax:** (516) 683-1413  
**Email:** swheeler@ref-fuel.com

**A.4 Facility location:**

**Street Address:** 600 Merchants Concourse  
**Address Cont:**  
**City:** Westbury  
**State:** NY  
**Zip Code:** 11590

**Mailing address (if different from above):**

**Mailing Address:**  
**Address Cont:**  
**City:**  
**State:**  
**Zip Code:**

**A.5 Facility's website address (if any):**<http://www.ref-fuel.com>**A.6 Number of employees (full-time equivalents) who currently work in the facility:**

50-99

**A.7 North American Industrial Classification System (NAICS) Code(s) that is(are) used to classify business at the facility:**

562213 221119

**A.8 In your application and, perhaps, in previous annual performance reports, you described what your facility does or makes. Have there been any (additional) changes to your facility's list of products and/or activities? If yes, please list them here:**

No Changes

**A.9 Have the environmental requirements applicable to your facility changed during this reporting period? If yes, please describe these changes here.**

Yes

As of October 31, 2003, the New York state limit for mercury emissions has been reduced to 28 ug/dscm corrected to 7% O<sub>2</sub> or 85% removal, whichever is least restrictive. For the first four years, the limit applies to the average emissions from the facility's three units, and then goes to a per unit limit. The facility demonstrated compliance with the new limit on each unit during annual stack testing in November 2003.

## SECTION B: ENVIRONMENTAL MANAGEMENT SYSTEM

### B.1.a When was an EMS assessment last conducted by an independent party at your facility?

None of the Above

If an assessment was conducted during 2003, please provide the type (e.g., ISO 14001 certification), the scope, and the month(s) of each assessment.

### B.1.b When was an internal EMS assessment last conducted at your facility?

2003

If an assessment was conducted during 2003, please provide the scope and month(s) of each assessment.

Scope	Dates
An environmental meeting is held each quarter with corporate environmental personnel, including the Director of Environmental Affairs, and plant management to discuss all on-going environmental issues - both compliance related and those associated with best management practices. Minutes of the meetings are recorded and distributed, and action items are tracked to completion. The date provided is for the last of these meetings in 2003.	December 2003

### B.1.c When was an internal or corporate compliance audit last conducted at your facility?

2003

If an audit was conducted during 2003, please provide the scope and the month(s) of each audit, and indicate who conducted the audit(s) (e.g., facility staff, corporate groups, third party). (Don't include audits, inspections, or site visits by regulatory or external organizations).

Scope	Dates	Who conducted the audit
An internal compliance audit was conducted each month in 2003 and the results were incorporated into the quarterly bonus paid to all facility employees. The facility was inspected for items such as housekeeping, chemical storage, control of fugitive emissions, regulatory reporting, and proper waste management. To foster continuous improvement, targets are set at the average score from the previous two years and the facility must perform at a level above average to earn the maximum available	December 2003	The Environmental Manager responsible for the three facilities in American Ref-Fuel's southern region.

bonus. Two out of three audits each quarter were completed by a corporate environmental manager. The date listed is for the last audit conducted in 2003.		
To increase participation and awareness at the plant level, one of the monthly audits during each quarter was conducted by facility management using the same scope and scoring system as above. The date provided is for the last audit conducted in 2003 and the auditors listed are those who typically participated.	November 2003	The Plant Manager, Operations Manager, Maintenance Manager, and Plant Environmental Engineer.
A general facility inspection is completed each year by an individual licensed to practice engineering in the State of New York. The purpose of the inspection is to verify compliance with the applicable regulations and to evaluate the operating condition of the plant equipment. The results of the inspection are documented in a summary report and submitted to the NYS Department of Environmental Conservation.	December 2003	The Environmental Manager responsible for the three facilities in American Ref-Fuel's southern region.

**B.1.d (Optional) If you would like to describe any other audits or inspections that were conducted at your facility, please do so here.**

An on-site Environmental Monitor from the NYS Department of Environmental Conservation is assigned to the facility and conducts compliance inspections an average of three times per week. He focuses on solid waste management and air quality regulations and reports his findings to the facility after each inspection. In addition, the Environmental Monitor completes a more thorough inspection of the air quality requirements, including a review of records, once each quarter.

**B.1.e Briefly summarize corrective actions taken and other improvements made as a result of your EMS assessments and compliance audits.**

The following were completed as a result of our EMS assessments and compliance audits: the fabric filter bags in ten of the 36 baghouse cells were replaced with a new fabric that is designed to improve flue gas cleaning efficiency and help reduce emissions; sonic horns were installed in ten fabric filter cells to reduce potential wear on the bags during the bag cleaning process and minimize premature failure; warning alarms were added to the continuous emissions monitoring data acquisition system (CEMDAS) to alert the Control Room Operator to a potential problem and reduce the likelihood of an environmental exceedance; the scraper rings inside the acid gas scrubbers were removed to reduce the potential for fugitive emissions and in Scrubber 2, were replaced by sonic horns to evaluate their effectiveness in removing build-up; oil drip pans were installed under the baghouse double flap gearboxes to prevent potential spills to the ground; and the secondary containment curbing around the fuel oil loading and unloading area was replaced using hydraulic cement and an epoxy seal to minimize the potential for leakage.

**B.1.f Has your facility corrected all instances of potential non-compliance and EMS non-conformance identified during your audits and other assessments?**

No

To minimize interruptions of plant operations when maintenance work is required in the ferrous metal recovery area, the facility is equipped with an alternate loadout system for ash residue. This system includes an enclosed conveyor belt that exits the main boiler house building and discharges the ash residue to a waiting trailer in a separate enclosed building. Over the winter, the floor of the conveyor failed due to advanced age and at times, a minimal amount of ash material may spill out. The ash is generally collected in a small impermeable

pit, but there is potential for fugitive emissions. As a corrective action, the facility has a plan in place to enclose the area under the conveyor, while still allowing access to clean any spilled ash. This work will be completed when the weather allows.

**B.1.g When was the last Senior Management review of your EMS completed?**

March 2004

**Who was the senior manager present at the review?**

**Name:** Mr. Kenneth Armellino, P.E.

**Title:** Environmental Manager

**B.2.a ISO 14001 Certification. Is your facility currently certified to ISO 14001?**

No

**B.2.b Is your facility a Responsible Care-certified facility?**

**B.3 Environmental Aspects Identification. When did your facility last conduct a systematic identification and/or review of your environmental aspects?**

April 2002

**B.4 Progress Toward Achieving Objectives and Targets. In the table below, please provide a narrative summary of progress made toward EMS objectives and targets other than those reported as Environmental Performance Commitments in Section C. You may limit the summary to environmental aspects that are significant and towards which progress has been made during the reporting year. Do you have additional environmental aspects to report? No**

## SECTION C: ENVIRONMENTAL PERFORMANCE COMMITMENTS

### COMMITMENT 1

<b>Category:</b>	Water Use				
<b>Aspect:</b>	Total Water Use				
<b>Specific Information on Aspect (Optional):</b>	Based on reuse of collected stormwater.				
	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Performance Commitment</b>
<b>Calendar Year:</b>	2001	2002	2003	2004	2004
<b>Actual Quantity (per year):</b>	487,500,000	495,763,000	506,289,000		482,000,000
	gallons	<b>Other:</b>			

<b>Measurement Units:</b>					
<b>Normalizing Factor:</b>	1.0	1.0	1.026		1.0 *
<b>Basis for your Normalizing Factor:</b>	Steam Generation. Total water usage at the facility is directly related to the amount of steam generated in the boilers. In 2003, the facility generated approximately 5,789,500 kilopounds of steam compared to 5,642,800 kilopounds in 2001. The ratio of 2003 to 2001 is 1.026.				
<b>Normalized Quantity per year:</b>	487,500,000	495763000	493459064.33		482000000

\* Estimated

**Explain Exclusions:****C.1.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

Achieving this commitment is dependent on completion of a capital project that will modify the stormwater collection system and allow the facility to reuse the stormwater in the plant. Due to budgetary constraints caused by unforeseen circumstances, completion of the project was delayed from 2003 to 2004. Currently, the engineering and design of the modifications are virtually complete and the project is scheduled for June 2004, following the major scheduled boiler and turbine outages discussed under Commitment 2 below. We will begin to reuse the stormwater immediately upon completion of the project and the rate of reuse will be such that we would expect the annualized total to meet our commitment. However, since the total reduction in water usage the facility committed to is based on operating the new system for a full year, we may not be able to achieve our annual goal by the end of 2004.

**C.1.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

None

**COMMITMENT 2**

<b>Category:</b>	Energy Use				
<b>Aspect:</b>	Total Energy Use				
<b>Specific Information on Aspect (Optional):</b>	Measured by steam consumed to generate electricity.				
	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Performance Commitment</b>
<b>Calendar Year:</b>	2001	2002	2003	2004	2004
<b>Actual Quantity (per year):</b>	8,000,000	8,000,000	8100000		7,840,000

<b>Measurement Units:</b>	mmBtu	<b>Other:</b>			
<b>Normalizing Factor:</b>	1.0	1.0	1.019		1.0 *
<b>Basis for your Normalizing Factor:</b>	Net Power Generation. The goal of this commitment is to improve the efficiency of the turbine/generator to provide improved power generation from the same amount of steam, measured as mmBtu consumed by the turbine. In 2003, the facility generated 557,460 MW-hrs of power compared to 547,057 MW-hrs in 2001. The ratio of 2003 to 2001 is 1.019.				
<b>Normalized Quantity per year:</b>	8,000,000	8000000	7948969.58		7840000

\* Estimated

**Explain Exclusions:****C.2.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

Achievement of this commitment is dependent on efforts to increase the efficiency of the facility's turbine. The work is scheduled to be completed in conjunction with back-to-back boiler outages from late April to early May 2004. During the turbine outage, which is scheduled for 16 days, various internal components will be thoroughly cleaned, any damaged nozzles will be repaired or replaced, and the last row of blades will be replaced, as it is approaching the end of its expected life. In addition, valve work will be completed that will allow the turbine to consume additional steam that is already being generated, but is currently being wasted to the dump condenser. This steam will be converted to electricity for sale to the local utility. At the completion of this outage, we expect to meet the commitment for the rate of steam usage indicated in our application. However, when summed over the entire year, we may not achieve the total energy use goal listed above, since we will not have a full year to operate after the completion of work.

**C.2.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

None

**COMMITMENT 3**

<b>Category:</b>	Waste				
<b>Aspect:</b>	Hazardous Solid Waste				
<b>Specific Information on Aspect (Optional):</b>	Used parts washer solvent.				
	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Performance Commitment</b>
<b>Calendar Year:</b>	2001	2002	2003	2004	2004
	450	450	115		100

<b>Actual Quantity (per year):</b>					
<b>Measurement Units:</b>	lbs	<b>Other:</b>			
<b>Normalizing Factor:</b>	1.0	1.0	1.0		1.0 *
<b>Basis for your Normalizing Factor:</b>	Production				
<b>Normalized Quantity per year:</b>	450	450	115		100

\* Estimated

**Explain Exclusions:****C.3.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

A new parts washer that recycles its own solvent, and therefore does not generate hazardous waste, was received in January 2003. The 115 pounds of hazardous waste indicated above was generated from decommissioning the old parts washer and was a one-time occurrence. If not for taking the old washer out of service, this commitment would have been met in 2003. It will be achieved in 2004.

**C.3.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

None

**COMMITMENT 4**

<b>Category:</b>	Water Use				
<b>Aspect:</b>	Total Water Use				
<b>Specific Information on Aspect (Optional):</b>	Wastewater to public sewer system.				
	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Performance Commitment</b>
<b>Calendar Year:</b>	2001	2002	2003	2004	2004
<b>Actual Quantity (per year):</b>	178,053	207,778	35,440		50,000

Actual (ADMIN) Quantity (per year):					
Measurement Units:	gallons	Other:			
Normalizing Factor:	1.0	1.0	1.0		1.0 *
Basis for your Normalizing Factor:	Production				
Normalized Quantity per year:	178,053	207,778	35,440		50,000
Normalized (ADMIN) Quantity per year:					

\* Estimated

**Explain Exclusions:**

Commitment focuses on the gallons of wastewater generated, not the total amount of water used or as previously committed to, the amount of materials (e.g., COD, BOD) in the discharged water.

**C.4.b Briefly describe how you achieved improvements for this aspect or, if relevant, any circumstances that delayed progress.**

This commitment is based on reuse of boiler water that was being discharged to the plant's low quality water system at the time of application. The low quality water is generally reused within the plant to add moisture to the ash residue generated from waste combustion. However, when the system is overwhelmed, which sometimes occurred during a boiler outage prior to the change, the excess had to be discharged to the public sewer system and eventually replaced with raw water. The piping modification needed to achieve this commitment was completed in February 2003 and all water drained from the boilers is now piped to a holding tank, then pumped back into the boiler at the completion of the outage. Wastewater discharges have been reduced significantly since the work was completed and the only time it was discharged in 2003 was as a result of the major blackout in August. This commitment has been achieved.

**C.4.c Please list any other EPA voluntary programs to which you are also reporting these data (e.g. Energy Star, Project XL).**

None

**SECTION D: PUBLIC OUTREACH AND PERFORMANCE REPORTING****D.1 Please briefly describe the activities that your facility conducted during the year to interact with the community on environmental issues and to report publicly on environmental performance.**

1. The Plant Manager and Environmental Engineer meet with the local Solid Waste Advisory Committee (SWAC) approximately every 6 weeks to discuss environmental and operational

issues at the facility and answer any questions from the group. There were nine meetings in 2003, including one in December that was held at the facility. 2. The facility held its 13th annual recycling poster contest in 2003, which attracted 1195 entries (up from 878 in 2003) from 39 elementary schools. Prizes were awarded to the top 3 posters in each age category. 3. The facility hosted a total of 110 tours for 1989 visitors in 2003. Of these, 26 tours (462 students) were for science courses such as Biology, Environmental Science, and Mechanical Engineering taught at six local colleges. In addition, the lab book for the Biology 101 course taught at the local community college includes a section on American Ref-Fuel and each class takes a plant tour. 4. During 2003, American Ref-Fuel was one of four corporate sponsors of a year-long monthly feature titled "Our Natural World" in NEWSDAY, which is the newspaper that serves Long Island, NY. One Sunday each month there was a pull-out section featuring a different aspect of nature on the Island. Ref-Fuel received a half-page ad in each feature, which enabled us to publicize our environmental record, including our participation in Performance Track. 5. American Ref-Fuel was recently notified that we have been selected to win the 2004 Performance Track Outreach Award for our efforts to spread the word about the program and encourage others to apply for membership in 2003. A copy of our application detailing our efforts is attached.

**D.2 Please indicate which of the following methods your facility plans to use to make its Performance Track Annual Performance Report available to the public.**

Web Site

Meetings

URL: <http://www.ref-fuel.com>

Attachments (if applicable) :

**Ref-Fuel 2003 PT Outreach Appl.doc**